1.(Previously Amended)A tool piece comprising:

(a) a hardmetal body;

(b) an additional body contiguously contacting the hardmetal body;

(c) a substantially discontinuous gradient-free boundary, formed at a temperature less than a temperature for forming a liquid phase and a superatmospheric pressure, between the hardmetal body and the additional body; and

(d) a mating surface between the hardmetal body and the additional body including macro mating features having a macro feature area to a perturbated macro feature area ratio comprising slightly greater than about 1:2 to about 1:50.

2.(Previously Amended)The tool piece according to Claim 1, wherein the macro feature area to the perturbated macro feature area ratio comprises slightly greater than about 1:3 to about 1:50.

3.(Previously Amended)The tool piece according to Claim 1, wherein the mating surface includes a male portion on one of the bodies and a corresponding female portion on the other of the bodies.

4.(Previously Amended)The tool piece according to Claim 1, wherein the mating surface is symmetrical.

5.(Original)The tool piece according to Claim 4, wherein the mating surface is axially symmetrical.

6.(Original)The tool piece according to Claim 5, wherein the mating surface is dimpled.

7.(Previously Amended)The tool piece according to Claim 1, wherein the mating surface is asymmetrical.

8.(Previously Amended)The tool piece according to Claim 1, further including micro mating features thereby having both micro and macro mating features.

9.**(Currently Amended)**The tool piece according to Claim 8, wherein the micro and macro mating features are represented as a periodic function subdivided into a finite number of continuous intervals within ~~it~~ its period.

10.(Original)The tool piece according to Claim 8, wherein the micro and macro mating features include one or more of half circles, half ovals, half ellipses, triangles, sawtooth curves, and truncated versions of any of the preceding.

11.(Previously Amended)The tool piece according to Claim 1, wherein the macro feature area to the perturbated macro feature area ratio comprises slightly greater than about 1:2 to about 1:25.

12.(Previously Amended)The tool piece according to Claim 11, wherein the macro feature area to the perturbated macro feature area ratio comprises slightly greater than about 1:2 to about 1:10.

13.(Previously Amended)The tool piece according to Claim 1, wherein the micro mating feature comprises a size of about 100μm to about 1cm.

14.**(Currently Amended)**The tool piece according to Claim 1, wherein the hardmetal has a porosity rating of no higher than substantially A06, B00, C08 to better than substantially A02, B00, and C00.

15.(Previously Amended)A tool piece, the tool piece comprising:

(a) a hardmetal body including a hard particle component and a binder;

(b) an additional body contiguously contacting the hardmetal body; and

(c) a substantially discontinuous gradient-free boundary, formed at a temperature less than a temperature for forming a liquid phase and a superatmospheric pressure, between the hardmetal body and the additional body; and

(d) a mating surface between the hardmetal body and the additional body ~~including micro mating features and macro mating features~~, the macro mating features having a macro feature area to a perturbated macro feature area ratio comprising slightly greater than about 1:2 to about 1:25.

16.**(Currently Amended)**The tool piece according to Claim 15, wherein the additional body comprises at least one of a metal body, a ceramic body, and an ~~addition~~ additional hardmetal body.

17.**(Currently Amended)**The tool piece according to Claim 15, wherein the additional body comprises at least one ~~addition~~ additional hardmetal body including a hard particle component and a binder.

18.(Original)The tool piece according to Claim 17, wherein the hard particle components are a carbide.

19.(Original)The tool piece according to Claim 18, wherein the carbide is a tungsten carbide.

20.(Original)The tool piece according to Claim 19, wherein the carbide grain size is about 0.2 μm to about 40 μm.

21.**(Currently Amended)**The tool piece according to Claim 17, wherein the binder of the hardmetal bodies is selected from the group consisting of cobalt, nickel, ~~and~~ iron, and their alloys.

22.**(Currently Amended)**The tool piece according to Claim 21, wherein the binder of the hardmetal body ~~comprise~~ comprises a composition substantially different from the binder of the additional hardmetal body.

23.(Original)The tool piece according to Claim 15, wherein the binder comprises cobalt or cobalt alloys.

24.(Original)The tool piece according to Claim 8, wherein the binder of each hardmetal body is about 0 wt.%. to about 25 wt.%.

25.(Previously Amended)A tool piece, the tool piece comprising:

(a) a hardmetal body including a hard particle component and a binder;

(b) an additional body contiguously contacting the hardmetal body;

(c) a substantially discontinuous gradient-free boundary, formed at a temperature less than a temperature for forming a liquid phase and a superatmospheric pressure, between the hardmetal body and the additional body; and

(d) a mating surface between the hardmetal body and the additional body including macro mating features having a macro feature area to a perturbated macro feature area ratio comprising slightly greater than about 1:2 to about 1:50.

26-41(Canceled)

42.(Previously Amended)The tool piece according to Claim 25, wherein the macro feature area to the perturbated macro feature area ratio comprises slightly greater than about 1:3 to about 1:50.

43.(Previously Amended)The tool piece according to Claim 25, wherein the mating surface includes a male portion on one of the bodies and a corresponding female portion on the other of the bodies.

44.(Previously Amended)The tool piece according to Claim 25, wherein the mating surface is symmetrical.

45.(Previously Presented)The tool piece according to Claim 44, wherein the mating surface is axially symmetrical.

46.(Previously Presented)The tool piece according to Claim 45, wherein the mating surface is dimpled.

47.(Previously Amended)The tool piece according to Claim 25, wherein the mating surface is asymmetrical.

48.(Previously Amended)The tool piece according to Claim 25, further including micro mating features thereby having both micro and macro mating features.

49.**(Currently Amended)**The tool piece according to Claim 48, wherein the micro and macro mating features are represented as a periodic function subdivided into a finite number of continuous intervals within ~~it~~ its period.

50.(Previously Presented)The tool piece according to Claim 48, wherein the micro and macro mating features include one or more of half circles, half ovals, half ellipses, triangles, sawtooth curves, and truncated versions of any of the preceding.

51.(Previously Amended)The tool piece according to Claim 25, wherein the macro feature area to the perturbated macro feature area ratio comprises slightly greater than about 1:3 to about 1:25.

52.(Previously Amended)The tool piece according to Claim 51, wherein the macro feature area to the perturbated macro feature area ratio comprises slightly greater than about 1:3 to about 1:10.

53.(Previously Amended)The tool piece according to Claim 25, wherein the micro mating feature comprises a size of about 100μm to about 1cm.

54.**(Currently Amended)**The tool piece according to Claim 25 wherein the hardmetal has a porosity rating of no higher than substantially A06, B00, C08 to better than substantially A02, $B00_a$ and C00.

55.**(Currently Amended)**The tool piece according to Claim 25, wherein the additional body comprises at least one of a metal body, a ceramic body, and an ~~addition~~ additional hardmetal body.

56.**(Currently Amended)**The tool piece according to Claim 25, wherein the additional body comprises at least one ~~addition~~ additional hardmetal body including a hard particle component and a binder.

57.(Previously Presented)The tool piece according to Claim 56, wherein the hard particle components are a carbide.

58.(Previously Presented)The tool piece according to Claim 57, wherein the carbide is a tungsten carbide.

59.(Previously Presented)The tool piece according to Claim 58, wherein the carbide grain size is about 0.2 μm to about 40 μm.

60.**(Currently Amended)**The tool piece according to Claim 56, wherein the binder of the hardmetal bodies is selected from the group consisting of cobalt, nickel, ~~and~~ iron, and their alloys.

61.**(Currently Amended)**The tool piece according to Claim ~~21~~ 60, wherein the binder of the hardmetal body ~~comprise~~ comprises a composition substantially different from the binder of the additional hardmetal body.

62.(Previously Presented)The tool piece according to Claim 25, wherein the binder comprises cobalt or cobalt alloys.

63.(Previously Presented)The tool piece according to Claim 48, wherein the binder of each hardmetal body is about 0 wt.%. to about 25 wt.%.